UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J. F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203

December 23, 1986

Mr. John G. Whitehead, Plant Manager
United Technologies Pratt and Whitney
400 Main Street
East Hartford, CT 06108

Re: Comments on Burn-Zol Hazardous Waste Incinerator Closure Plan
Located at the Main Street East Hartford Facility.

Dear Mr. Whitehead:

Attached please find comments identifying specific deficiencies in the closure plan submitted to the Department of Environmental Protection July 16, 1986.

Please note that these comments reflect the requirements of 40 CFR 265 Subpart G as revised (effective 10/29/86).

If you have any questions regarding these comments please contact us.

Sincerely,

Art Wing, Environmental Engineer
Waste Management Division
(617) 223-1910

George Dews, Senior Sanitary Engineer
Hazardous Materials Management Unit
Connecticut Department of Environmental Protection
(203) 566-2264

cc: K. Vidmar

GENERAL COMMENTS

The partial closure plan deficiencies occur in three areas. The maximum waste inventory does not take into consideration residues such as ash, scrubber waters, and scrubber sludges from the incineration equipment. Removal and clean-up procedures do not describe how these residues and the refractories will be removed, and how the outside of the incineration equipment, the cleaning equipment, the building, concrete pad, or surrounding structures and soils will be cleaned.

The portions of the closure costs provided in the plan are adequate. However, no closure costs have been estimated for testing or decontamination of the outside of the incineration equipment, the concrete pad and surrounding structures or the inside of the building, the cleaning equipment, and the surrounding soils, and no explanation has been given for not including these activities in the costs. The closure cost estimate must be based on third party costs.

SPECIFIC COMMENTS

A-1 Closure Plan Requirements: 265.110 through 265.115, 265.351

Revise the partial closure plan to incorporate detailed procedures to sample, remove and/or decontaminate the outside of the incineration equipment, the concrete pad and surrounding structures or the inside of the building, the cleaning equipment, and the surrounding soils.

Alternately an explanation may be given for not performing some of these activities. The partial closure plan should be revised to be consistent with deficiency comments A-1b through A-1g.

A-1b Maximum Waste Inventory: 265.112(b)(3)

Include in the maximum inventory estimates the maximum amount of hazardous waste residue, such as ash, scrubber waters, and scrubber sludges from the incinerator, waste heat boiler, and air pollution control equipment.

A-1c Closure of Hazardous Waste Units: 265.112(b)(4), 265.112(b)(5), 265.114

Include the following information regarding decontamination:

(1) A list of potentially contaminated areas in the area surrounding the incinerator;

(2) Methods for sampling and testing surrounding soils;

(3) Procedures for cleaning (outside and inside), removing, or disposing of contaminated equipment, structures, and soils

A-1c(5)(a) Removal of all Hazardous Wastes and Waste Residue: 265.351

Describe how all waste residues such as ash, scrubber waters, and scrubber sludges will be

removed from the incinerator, waste heat boiler, and associated air pollution control equipment.

A-1c(5)9b) Decontamination/Disposal Procedures For Incinerators and Associated Equipment, Adjacent Surface and Subsoils, and Clean-up Equipment: 265.351, 265.114

Discuss the procedures for decontaminating the incinerator and associated equipment (outside and inside), including ash collection and emissions control equipment, clean-up equipment, and the surrounding area.

Unless a demonstration can be made that they are not hazardous wastes, all residues must be managed as hazardous wastes. Describe how the residues will be properly treated or disposed.

Specify the procedures for determining if any surfaces or subsoils within or adjacent to the incinerator area are contaminated, and provide the procedures for removal, treatment or disposal of these contaminated materials.

A-1g Certification of Closure: 265.115

Specify that, when closure is completed, certification will be submitted by both the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the approved closure plan. The engineer certification should include records of inspection, sampling and analysis

results, and all observations made by the engineer to verify that the facility has been closed in accordance with the approved closure plan.

A-3 Closure Cost Estimate: 265.142

Include in the closure cost estimate cost of testing and decontamination of:

(1) any incinerator equipment surfaces;

(2) the concrete pad and surrounding structures or the interior of the building; and/or

(3) those soils in the surrounding area that may have been contaminated by drips, leaks, or spills during the testing of the incinerator.

The costs must be based on third party closure costs. Substantiate the costs in the closure cost estimate as being equivalent to third party costs or revise the closure costs estimate to account for third party closure.

DRAFT

INTERIM STATUS (265) CLOSURE/POST-CLOSURE PLAN CHECKLIST

		Provided (Y/N)	Adequate (Y/N)	Not Applicable	Comments
A-1	Closure plan requirements	Y	N		Pages 4-10 See comment A-1
A-1a(1)	Closure performance standard	Y	Y		Pages 1, 5-7
A-1a(2)	Partial closure activities	Y	N		Pages 4-8, See comment A-1c(5)
A-1b	Maximum waste inventory	Y	N		Page 5, See comment A-1b
A-1c	Closure of hazardous waste units	Y	N		Page 6, See comment A-1c
A-1c(1)	Closure of containers			NA	
A-1c(1)(a)	Removal of waste inventory			NA	
A-1c(1)(b)	Clean-up of spills or residues and decontamination procedures for liner or base and equipment			NA	
A-1c(1)(c)	Testing and analysis to demonstrate success of decontamination			NA	
A-1c(2)	Closure of tanks			NA	
A-1c(2)(a)	Removal of tank contents			NA	
A-1c(2)(b)	Decontamination/disposal procedures for tanks, appurtenances and adjacent soils/ subsoils and clean-up equipment			NA	
A-1c(2)(c)	Testing and analysis to demonstrate success of decontamination			NA	
A-1c(3)	Closure of waste piles			NA	
A-1c(3)(a)	Removal of waste pile contents, liner (if any), and other contaminated materials			NA	

INTERIM STATUS (265) CLOSURE/POST-CLOSURE PLAN CHECKLIST

		Provided (Y/N)	Adequate (Y/N)	Not Applicable	Comments
A-1c(3)(b)	Decontamination/disposal procedures for contaminated structures and equipment			NA	
A-1c(3)(c)	Testing and analysis to demonstrate success of decontamination of equipment and removal of contaminated soils			NA	
A-1c(4)	Closure of surface impoundments			NA	
A-1c(4)(a)	Removal of impoundment contents, liner (if any), and other contaminated materials			NA	
A-1c(4)(b)	Decontamination/disposal procedures for contaminated equipment			NA	
A-1c(4)(c)	Testing and analysis to demonstrate success of decontamination equipment			NA	
A-1c(5)	Closure of incinerators	Y	N		Page 5-6, See comments A-1c(5)(a), A-1c(5)(b)
A-1c(5)(a)	Removal of all hazardous waste and waste residues	Y	N		Page 5, See comment A-1c(5)(a)
A-1c(5)(b)	Decontamination/disposal procedures for incinerators and associated equipment, adjacent surface and subsoils, and clean-up equipment	Y	N		Pages 5-6, See comment A-1c(5)(b)

INTERIM STATUS (265) CLOSURE/POST-CLOSURE PLAN CHECKLIST

		Provided (Y/N)	Adequate (Y/N)	Not Applicable	Comments
A-1c(5)(c)	Testing and analysis to demonstrate success of decontamination	Y	Y		Pages 6-7
A-1c(6)	Closure of thermal treatment units			NA	
A-1c(6)(a)	Removal of all hazardous wastes and waste residue			NA	
A-1c(6)(b)	Decontamination/disposal procedures for thermal treatment units and associated equipment, adjacent surface and subsoils, and clean-up equipment			NA	
A-1c(6)(c)	Testing and analysis to demonstrating successs of decontamination			NA	
A-1c(7)	Closure of chemical, physical, and biological treatment units			NA	
A-1c(7)(a)	Removal of all hazardous wastes and waste residues			NA	
A-1c(7)(b)	Decontamination/disposal procedures for chemical, physical and biological treatment units and associated equipment, adjacent surface and subsoils, and clean-up equipment			NA	
A-1c(7)(c)	Testing and analysis to demonstrate success on decontamination			NA	
A-1c(8)	Closure of land treatment units			NA	
A-1c(8)(a)	Discontinuation of waste application			NA	

INTERIM STATUS (265) CLOSURE/POST-CLOSURE PLAN CHECKLIST

		Provided (Y/N)	Adequate (Y/N)	Not Applicable	Comments
A-1c(8)(b)	Removal of contaminated soil			NA	
A-1c(8)(c)	Continuation of treatment			NA	
A-1c(8)(c)(1)	Maintenance of run-on control			NA	
A-1c(8)(c)(2)	Maintenance of run-off control			NA	
A-1c(8)(c)(3)	Control of particulate releases			NA	
A-1c(8)(c)(4)	Compliance of food-chain crop restrictions			NA	
A-1c(8)(c)(5)	Unsaturated zone monitoring			NA	
A-1c(8)(d)	Land treatment unit cover			NA	
A-1c(8)(e)	Equipment decontamination or disposal			NA	
A-1d	Closure of disposal units			NA	
A-1d(1)	Disposal impoundments			NA	
A-1d(1)(a)	Elimination of liquids			NA	
A-1d(1)(b)	Waste stabilization			NA	
A-1d(2)	Cover design			NA	
A-1d(3)	Minimization of liquid migration			NA	
A-1d(4)	Maintenance needs			NA	
A-1d(5)	Drainage and erosion			NA	
A-1d(6)	Settlement, subsidence, and displacement			NA	

INTERIM STATUS (265) CLOSURE/POST-CLOSURE PLAN CHECKLIST

		Provided (Y/N)	Adequate (Y/N)	Not Applicable	Comments
A-1d(7)	Cover permeability			NA	
A-1d(8)	Freeze/thaw effects			NA	
A-1d(9)	Disposal or decontamination of equipment			NA	
A-1e	Schedule for closure	Y	Y		Page 8
A-1f	Extensions for closure time	Y	Y		
A-1g	Certification of closure	Y	N		Page 12, See comment A-1g
A-2	Post-closure plan requirements			NA	
A-2a	Post-closure contact			NA	
A-2b	Post-closure security			NA	
A-2c	Inspection plan			NA	
A-2d	Monitoring plan			NA	
A-2e	Maintenance plan			NA	
A-2f	Land treatment			NA	
A-2g	Notice to local land authority			NA	
A-2h	Notice in deed			NA	
A-2i	Certification of post-closure			NA	
A-3	Closure cost estimate	Y	N		Pages 8-10, See comment A-3
A-4	Financial assurance mechanism for closure			NA	(Not reviewed)

INTERIM STATUS (265) CLOSURE/POST-CLOSURE PLAN CHECKLIST

		Provided (Y/N)	Adequate (Y/N)	Not Applicable	Comments
A-4a	Closure trust fund	____	____	NA	____
A-4b	Surety bond guaranteeing payment into a closure fund	____	____	NA	____
A-4c	Closure letter of credit	____	____	NA	____
A-4d	Closure insurance	____	____	NA	____
A-4e	Financial test and corporate guarantee for closure	____	____	NA	____
A-4f	Use of multiple financial mechanisms	____	____	NA	____
A-4g	Use of financial mechanism for multiple facilities	____	____	NA	____
A-5	Post-closure cost estimates	____	____	NA	____
A-6	Financial assurance mechanism for post-closure care	____	____	NA	____
A-6b	Surety bond guaranteeing payment into a post-closure trust fund	____	____	NA	____
A-6c	Post-closure letter of credit	____	____	NA	____
A-6d	Post-closure insurance	____	____	NA	____
A-6e	Financial test and corporate guarantee for post-closure care	____	____	NA	____
A-6f	Use of multiple financial mechanisms	____	____	NA	____
A-6g	Use of a financial mechanism for multiple facilities	____	____	NA	____

INTERIM STATUS (265) CLOSURE/POST-CLOSURE PLAN CHECKLIST

		Provided (Y/N)	Adequate (Y/N)	Not Applicable	Comments
A-7	Liability requirements			NA	(Not reviewed)
A-7a	Coverage for sudden accidental occurrences			NA	
A-7a(1)	Endorsement or certification			NA	
A-7a(2)	Financial test for liability			NA	
A-7a(3)	Use of multiple insurance mechanisms			NA	
A-7b	Coverage for nonsudden accidenal occurrences			NA	
A-7b(1)	Endorsement or certification			NA	
A-7b(2)	Financial test for liability coverage			NA	
A-7b(3)	Use of multiple insurance mechanisms			NA	
A-7c	Request for variance			NA	
A-8a	Use of state-required mechanisms			NA	
A-8b	State assumption of responsibility			NA	